CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 69. (Canceled)

70. (Currently Amended) A method comprising:

generating, at a video server, a frame index for a video stream, the frame index comprising a plurality of frame index entries corresponding to a plurality of frames of the video stream, wherein a first set of frames of the plurality of frames is to be displayed prior to a second set of frames of the plurality of frames in a forward presentation of the video stream;

receiving, at the video server, a first presentation request for the video stream from a display client via a network, the video server remote to the display client, the first presentation request comprising a request for reverse playback;

determining, at the video server, ~~a first subset of frames of the plurality of frames and a first presentation sequence for the first subset of frames~~ a first subset of frames of the first set and a second subset of the frames of the second set based on the frame index in response to the first presentation request, the first subset comprising an intra-coded frame and at least one forward-predicted frame of the first set of frames and the second subset comprising an intra-coded frame and at least one forward-predicted frame of the second set of frames;

transmitting the second subset of frames to the display client via the network; and

transmitting the first subset of frames ~~having the first presentation sequence~~ to the display client via the network subsequent to transmitting the second subset of frames.

71. (Previously Presented) The method of claim 70, wherein each frame index entry of the plurality of frame index entries comprises an identifier of a frame type of a corresponding frame.

72. (Previously Presented) The method of claim 71, wherein each frame index entry further comprises an offset value identifying a starting location of data representative of the corresponding frame within a file representative of the video stream and a size value representative of a size of the data representative of the corresponding frame.

73. (Previously Presented) The method of claim 70, wherein generating the frame index comprises:

    receiving, at the video server, an encoded data stream representative of the video stream;

    processing, at the video server, the encoded data stream to identify each frame of the video stream; and

    generating, at the video server, a frame index entry of the frame index for each frame identified during processing; and

    storing the encoded data stream.

74. (Previously Presented) The method of claim 70, wherein generating the frame index comprises:

    receiving, at the video server, an unencoded data stream representative of the video stream;

    encoding, at the video server, the unencoded data stream to generate an encoded data stream representative of the video stream; and

    generating, at the video server, a frame index entry of the frame index for each identified frame of the encoded video stream; and

    storing the encoded video stream.

75. (Currently Amended) The method of claim 70, further comprising:

receiving, at the video server, a second presentation request for the video stream from the display client via the network, the second presentation request comprising a request for a fast forward playback;

determining, at the video server, ~~a second subset of frames of the plurality of frames and a second presentation sequence for the second subset of frames~~ a third subset of frames of the first set and a fourth subset of frames of the second set based on the frame index in response to the second presentation request;

transmitting the third subset of frames to the display client via the network; and

transmitting the [[second]]fourth subset of frames ~~having the second presentation sequence to~~ the display client via the network subsequent to transmitting the third subset of frames.

76. (Canceled)

77. (Currently Amended) The method of claim 75, wherein ~~the first presentation request comprises a request for a fast-forward playback at a first rate and the second presentation request comprises a request for a fast-forward playback at a second rate, the second rate greater than the first rate~~ the third subset includes only intra-coded frames and forward-predicted frames of the first set and the fourth subset includes only intra-coded frames and forward predicted frames of the second set.

78. (Currently Amended) The method of ~~claim 77~~claim 75, wherein ~~the first subset of the plurality of frames includes only intra-coded frames and forward-predicted frames and the second subset of the plurality of frames includes only intra-coded frames~~ the first subset includes only intra-coded frames of the first set and the fourth subset includes only intra-coded frames of the second set.

79. (Canceled)

80. (Currently Amended) The method of ~~claim 79~~claim 70, wherein ~~the first presentation request comprises one of a request for a fast-forward playback or a request for a fast-reverse playback~~the first set of pictures comprises a first Group of Pictures (GOP) and the second set of pictures comprises a second GOP.

81. (Currently Amended) The method of claim 70, further comprising:

receiving, at the display client, user input indicating a requested reverse playback of the video stream~~, the requested playback comprising one of a fast-forward playback or a fast-reverse playback~~;

generating, at the display client, the first presentation request based on the user input;

transmitting the first presentation request from the display client to the video server via the network;

receiving, at the display client, the second subset of frames;

receiving, at the display client, the first subset of frames ~~having the first presentation sequence~~subsequent to receiving the first subset of frames;

processing, at the display client, the second subset of frames for display; and

processing, at the display client, the first subset of frames for display subsequent to display of the second subset of frames ~~in a display sequence based on the first presentation sequence~~.

82. (Currently Amended) The method of claim 81, wherein the first subset of frames and second subset of frames [[is]]are represented by encoded data and processing the first subset of frames and processing the second subset of frames comprises decoding the encoded data.

83. (Currently Amended) The method of claim 70, further comprising:

for each frame of at least a portion of the second subset, modifying a presentation time stamp of the frame prior to transmitting the frame to the display client; and

for each frame of at least a portion of the first subset, modifying a presentation time stamp of the frame ~~based on the first presentation sequence~~prior to transmitting the frame to the display client.

84. (Currently Amended) A method comprising:

receiving, at a display client, user input indicating a requested reverse playback of a video stream having a plurality of frames, ~~the requested playback comprising one of a fast-forward playback or a fast-reverse playback~~;

generating, at the display client, a presentation request based on the user input;

transmitting the presentation request from the display client to a video server via a network, the video server remote the display client;

receiving, at the display client, ~~a subset of the plurality of frames having a presentation sequence based on the requested playback~~a second subset of frames from the video server via the network, the second subset of frames including an intra-coded

frame and at least one forward-predicted frame of a second set of frames of the video stream;

receiving, at the display client, a first subset of frames from the video server via the network subsequent to receiving the second subset of frames, the first subset of frames including an intra-coded frame and at least one forward-predicted frame of a first set of frames of the video stream, the first set of frames intended to be displayed prior to the second set of frames for a forward presentation of the video stream ; [[and]]

processing, at the display client, the second subset of the plurality of frames for display in a display sequence based on the presentation sequence; and

processing, at the display client, the first subset of frames for display subsequent to the second subset.

85. (Currently Amended) The method of claim 84, wherein the first subset of frames and the second subset of frames [[is]]are represented by encoded data and processing the first subset of frames comprises decoding the encoded data.

86. (Currently Amended) The method of claim 84, wherein the subset of the plurality of frames includes only intra-coded frames and forward-predicted framesthe first set of frames comprises a first Group of Pictures (GOP) of the video stream and the second set of frames comprises a second GOP of the video stream.

87. (Currently Amended) The method of claim 84claim 86, wherein: the subset of the plurality of frames includes only intra-coded frames

the requested reverse playback comprises a requested slow reverse playback;

the first subset comprises the first set; and

the second subset comprises the second set.

88. (Currently Amended) A system comprising:

a video server coupled to a network, the video server comprising:

a recording module to generate a frame index for a video stream, the frame index comprising a plurality of frame index entries corresponding to a plurality

of frames of the video stream, wherein a first set of frames of the plurality of frames is to be displayed prior to a second set of frames of the plurality of frames in a forward presentation of the video stream;

an interface coupled to the network, the interface to receive a first presentation request for the video stream from a display client via the network, the video server remote to the display client, the first presentation request comprising a request for a reverse playback;

a presentation control to determine ~~a first subset of frames of the plurality of frames and a first presentation sequence for the first subset of frames~~ a first subset of frames of the first set and a second subset of the frames of the second set based on the frame index in response to the first presentation request, the first subset comprising an intra-coded frame and at least one forward-predicted frame of the first set of frames and the second subset comprising an intra-coded frame and at least one forward-predicted frame of the second set of frames; and

the interface further to:

transmit the second subset of frames to the display client via the network; and

transmit the first subset of frames ~~having the first presentation sequence~~ to the display client via the network subsequent to transmitting the second subset of frames.

89. (Previously Presented) The system of claim 88, wherein each frame index entry of the plurality of frame index entries comprises an identifier of a frame type of a corresponding frame.

90. (Previously Presented) The system of claim 89, wherein each frame index entry further comprises an offset value identifying a starting location of data representative of the corresponding frame within a file representative of the video stream and a size value representative of a size of the data representative of the corresponding frame.

91. (Previously Presented) The system of claim 88, wherein the recording module is to generate the frame index by:

receiving an encoded data stream representative of the video stream;

processing the encoded data stream to identify each frame of the video stream; and

generating a frame index entry of the frame index for each identified frame; and

storing the encoded data stream at the video server.

92. (Previously Presented) The system of claim 88, wherein the recording module is to generate the frame index by:

receiving an unencoded data stream representative of the video stream;

encoding the unencoded data stream to generate an encoded data stream representative of the video stream; and

generating a frame index entry of the frame index for each identified frame of the encoded video stream; and

storing the encoded video stream at the video server.

93. (Currently Amended) The system of claim 88, ~~further comprising~~wherein:

the interface further is to receive~~receiving, at the video server,~~ a second presentation request for the video stream from the display client via the network, the second presentation request comprising a request for fast forward playback;

the presentation control further is to ~~determining, at the video server, a second subset of frames of the plurality of frames and a second presentation sequence for the second subset of frames~~ determine a third subset of frames of the first set and a fourth subset of frames of the second set based on the frame index in response to the second presentation request; and

the interface further is to:

~~transmitting the second subset of frames having the second presentation sequence~~transmit the third subset of frames to the display client via the network; and

transmit the fourth subset of frames to the display client via the network subsequent to transmitting the third subset of frames.

94. (Canceled)

95. (Currently Amended) The system of claim 93, wherein ~~the first presentation request comprises a request for a fast forward playback at a first rate and the second presentation request comprises a request for a fast forward playback at a second rate, the second rate greater than the first rate~~the third subset includes only intra-coded frames of the first set and the fourth subset includes only intra-coded frames of the second set.

96. (Currently Amended) The system of ~~claim 95~~claim 88, wherein ~~the first subset of the plurality of frames includes only intra-coded frames and forward-predicted frames and the second subset of the plurality of frames includes only intra-coded frames~~the first subset includes only intra-coded frames of the first set and the second subset includes only intra-coded frames of the second set.

97. (Currently Amended) The system of claim 88, wherein
the interface further is to receive a second presentation request for the video stream from the display client via the network, the second presentation request comprising a presentation request for a normal playback of the video stream;
the presentation control further is to determine a ~~second~~ presentation sequence for the plurality of frames based on the frame index in response to the second presentation request; and
the interface further is to transmit at least a portion of the plurality of frames having the ~~second~~ presentation sequence to the display client via the network.

98. (Currently Amended) The system of ~~claim 97~~claim 88, wherein ~~the first presentation request comprises one of a request for a fast-forward playback or a request for a fast-reverse playback~~ the first set comprises a first Group of Pictures (GOP) and the second set comprises a second GOP.

99. (Currently Amended) The system of claim 88, further comprising:
a display client coupled to the network, the display client to:

receive user input indicating a requested <u>reverse</u> playback of the video stream~~, the~~
~~requested playback comprising one of a fast-forward playback or a fast-~~
~~reverse playback~~;

generate the first presentation request based on the user input;

transmit the first presentation request to the video server via the network;

<u>receive the second subset of frames via the network;</u>

receive the first subset of frames ~~having the first presentation sequence~~<u>via the
network subsequent to receiving the second subset of frames</u>;

<u>process the second subset of frames for display;</u> and

process the first subset of frames for display<u> subsequent to the second subset of
frames</u> ~~in a display sequence based on the first presentation sequence~~.

100. (Previously Presented) The system of claim 99, wherein the first subset of frames is represented by encoded data and processing the first subset of frames comprises decoding the encoded data.

101. (Currently Amended) The system of claim 88, wherein:

the presentation control is further to<u>:</u>[[,]]

<u>for each frame of at least a portion of the second subset, modify a presentation
time stamp of the frame prior to transmission of the frame to the display
client; and</u>

for each frame of at least a portion of the first subset, modify a presentation time
stamp of the frame ~~based on the first presentation sequence~~<u>prior to</u>
transmission of the frame to the display client.